

REMARKS

Arrangement of the specification:

The specification has been amended in accordance with the specified guidelines as suggested. The title has been amended as directed.

Claim rejections – 35 USC §112

Claims 15 and 16 have been amended to eliminate the alternative formulation of the claims. New claims 20 and 21 have been added, addressing the alternatives eliminated by the amendments.

Claim rejections – 35 USC §102 and §103

The claims have been rejected under §102 or §103 in light of US 5,510,803 to Ishizaka.

The new claims as amended define an invention which is believed not to be anticipated by nor obvious in light of US 5,510,803.

US 5,510,803 discloses a dual polarisation planar antenna comprising among other things two layers of radiation elements. The elements in the two layers are connected to feeding lines which are perpendicular to one another, and the elements in a single layer are connected to one another by means of conductive paths which extend in one of two perpendicular directions. If this antenna is to be used as a receiver, the plane containing the elements of the –antenna should be perpendicular to the incoming radiation to obtain a satisfactory gain.

In contrast, the antenna according to the invention is specially adapted for vertical or almost vertical positioning. This is achieved by providing the antenna with conductive paths with slanted segments or bent segments. The amended claims more clearly specify this limitation which is neither disclosed by, nor suggested by, US 5,510,803. The inclined paths force a phase shift in the antenna to be able to receive signals with the antenna in a mainly vertical position. The angle of inclination for these paths will depend on the geographical position of the antenna. The bent paths remedy phase errors and impedance errors which arise from the phase shift performed by the inclined elements. This type of signal transmission paths leads to considerable improvement in the level of the received signal and makes it possible to receive satellite signals in a wide range of inclination angles with the antenna positioned substantially vertically.

In light of the foregoing, favourable reconsideration is solicited.